

Abstract

WAVELET FILTERING

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The preferred method wavelet filters a digital image. The digital image comprises a plurality of pixels arranged in a plurality of columns and rows. The method processes one or more bands of pixels of the image in turn, where each band comprises a plurality of rows. The method performs the following steps for each column in each one of the one or more bands of pixels. The method retrieves (316) a last pixel and last high pass coefficient previously stored in local storage. The method also inputs (306) a current group of adjacent pixels. The method then computes (308) the low and high pass wavelet coefficients utilizing the current group of adjacent pixels and the previous last pixel and last high pass coefficient. The method then outputs the low and high pass coefficients, and stores (312, 318) a current last pixel and high pass coefficient in either the local storage or external memory.

Fig. 3